

SEQUENCE LISTING

<110> Nihon University

<120> The CD20 gene of dog

<130> NICH14

<140> 2004-0033810

<141> 2004-02-10

<160> 20

<170> PatentIn Ver. 2.1

<210> 1

<211> 297

<212> PRT

<213> Dog

<220>

<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 1

Met Thr Thr Pro Arg Asn Ser Met Ser Gly Thr Leu Pro Val Asp Pro
1 5 10 15Met Lys Ser Pro Thr Ala Met Tyr Pro Val Gln Lys Ile Ile Pro Lys
20 25 30Arg Met Pro Ser Val Val Gly Pro Thr Gln Asn Phe Phe Met Arg Glu
35 40 45Ser Lys Thr Leu Gly Ala Val Gln Ile Met Asn Gly Leu Phe His Ile
50 55 60Ala Leu Gly Ser Leu Leu Met Ile His Thr Asp Val Cys Ala Pro Ile
65 70 75 80Cys Ile Thr Met Trp Tyr Pro Leu Trp Gly Gly Ile Met Phe Ile Ile
85 90 95Ser Gly Ser Leu Leu Ala Ala Ala Asp Lys Asn Pro Arg Lys Ser Leu
100 105 110Val Lys Gly Lys Met Ile Met Asn Ser Leu Ser Leu Phe Ala Ala Ile
115 120 125Ser Gly Ile Ile Phe Leu Ile Met Asp Ile Phe Asn Ile Thr Ile Ser
130 135 140His Phe Phe Lys Met Glu Asn Leu Asn Leu Ile Lys Ala Pro Met Pro
145 150 155 160Tyr Val Asp Ile His Asn Cys Asp Pro Ala Asn Pro Ser Glu Lys Asn
165 170 175Ser Leu Ser Ile Gln Tyr Cys Gly Ser Ile Arg Ser Val Phe Leu Gly
180 185 190Val Phe Ala Val Met Leu Ile Phe Ala Phe Phe Gln Lys Leu Val Thr
195 200 205Ala Gly Ile Val Glu Asn Glu Trp Lys Lys Leu Cys Ser Lys Pro Lys
210 215 220Ser Asp Val Val Val Leu Leu Ala Ala Glu Glu Lys Lys Glu Gln Pro
225 230 235 240Ile Glu Thr Thr Glu Glu Met Val Glu Leu Thr Glu Ile Ile Ala Ser
245 250 255Gln Pro Lys Lys Glu Glu Asp Ile Glu Ile Pro Val Gln Glu Glu Glu
260 265 270

Gly Glu Leu Glu Ile Asn Phe Ala Glu Pro Pro Gln Glu Gln Glu Ser
 275 280 285

Ser Pro Ile Glu Asn Asp Ser Ile Pro
 290 295

<210> 2
 <211> 44
 <212> PRT
 <213> Dog

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 2
 Thr Ile Ser His Phe Phe Lys Met Glu Asn Leu Asn Leu Ile Lys Ala
 1 5 10 15

Pro Met Pro Tyr Val Asp Ile His Asn Cys Asp Pro Ala Asn Pro Ser
 20 25 30

Glu Lys Asn Ser Leu Ser Ile Gln Tyr Cys Gly Ser
 35 40

<210> 3
 <211> 1238
 <212> DNA
 <213> Dog

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 3
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 ccagaaattc aatgagtgga accctcccgg tagatcctat gaaaagccct actgccatgt 120
 atcctgttca aaaaataatt cccaaaagga tgccttcagt ggtgggccct acacaaaact 180
 tcttcatgag ggaatctaag acactggggg ctgtccagat tatgaatggg ctcttcacca 240
 ttgccctagg cagcctcctg atgattcaca cggatgtctg tgcgcccatc tgtataacta 300
 tgttggtacc tctctgggga ggcattatgt tcatcatttc tggatcactc ctggcagcag 360
 cggacaaaaa ccccaggaag agtttgggtca aaggaaaaat gataatgaac tcattgagcc 420
 tctttgctgc catttctgga ataatttttt tgatcatgga catatttaat attaccattt 480
 cccatttttt taaaatggag aatttgaatc ttattaaagc tcccatgccca tatgttgaca 540
 tacacaactg tgaccagctg aacccctctg agaaaaactc tttatctata caatattgtg 600
 gcagcatacg atctgttttc ttgggcgttt ttgctgtgat gctgatcttt gccttcttcc 660
 agaacttgtg gacagctggc attgttgaga atgaatggaa aaaactgtgc tctaaacct 720
 aatctgatgt agttgttctg tttagctgtg aagaaaaaaa agaacagccg attgaaacaa 780
 cagaagaagt ggttgagctg actgaaatag cttcccaacc aaagaaagaa gaagacattg 840
 aaattattcc agtccaagaa gaagaagggg aactggaaat aaactttgca gaacctcccc 900
 aggagcagga atcttcacca atagaaaacg acagcatccc ttaagtaacg tttttcttcc 960
 tgtttccttt tcttaggcgt tagtgttcac agctttcaag agacatatcc acccctgttt 1020
 cctgaggccc cctgcagggt ggccctcctc atgtgtctct ctggcccttg catggagtga 1080
 ccacagctcg cttgcgctag ctgcgtctct ttctctcatg cagaggatgc agccattgca 1140
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 acttttcctt ggataaagct taaaaaaaaa aaaaaaaaaa 1238

<210> 4
 <211> 1238
 <212> RNA
 <213> Dog

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 4
 aucagccacu cgcccuuaagg ccacagacac ucaggaguuc agaggguagag augacaacac 60
 ccagaaaauu aaugagugga acccucccgg uagauccuau gaaaagcccu acugccaugu 120
 auccuguuca aaaaauaauu cccaaaagga ugccuucagu ggugggccc uacacaaaacu 180
 ucuuauagag ggaauuaaag acacuggggg cuguccagau uaugaauggg cucuuaccac 240
 uugcccuagg cagccuccug augauucaca cggauugucug ugcccccua uguauaacua 300
 uguguuaccc ucucugggga ggcauuuangu ucaucauuuc uggaucaucuc cuggcagcag 360

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cggacaaaaa ccccaggaag aguuugguca aaggaaaaau gauaauaac ucauugagcc 420
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cccauuuuuu uaaaauggag auuuugaauc uuauuaaagc ucccaugcca uauguugaca 540
uacacaacug ugaccagcu aacccucug agaaaaacuc uuuaucuaa caauauugug 600
gcagcauacg aucguuuuc ugggcguuu uugcugugau gcugaucuuu gccuucuucc 660
agaacuugu gacagcuggc auuguugaga augaauaggaa aaaacugugc ucuaaaccua 720
aaucugaugu aguuugucug uuagcugcug aagaaaaaaa agaacagccg auugaaaca 780
cagaagaaau gguugagcug acugaaauag cuucccaacc aaagaaagaa gaagacauug 840
aaauuuuucc aguccaagaa gaagaagggg aacuggaaau aaacuugca gaaccucccc 900
aggagcagga aucuucacca auagaaaacg acagcauccc uuaaguaacg uuuuuuuuc 960
uguuuccuuu ucuuaggcgu uaguguucac agcuuucaag agacauauc accccguuu 1020
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ccacagcug cuugcgcuag cugcucucu uuucucaug cagaggauug agccauugca 1140
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acuuuucccu ggauaaagcu uaaaaaaaaa aaaaaaaa 1238

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<210> 5
 <211> 132
 <212> DNA
 <213> Dog

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

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<400> 5
accatttccc atttttttaa aatggagaat ttgaatctta ttaaagctcc catgccatat 60
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tattgtggca gc 132

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<210> 6
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
 sequence

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

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<400> 6
agagagagag agaactagtc togagttttt ttttttttt ttt 43

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<210> 7
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
 sequence

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

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<400> 7
ctctttgtg ccatttctgg aat 23

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<210> 8
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
 sequence

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 8
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<210> 9
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
 sequence

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 9
 tgtaaaacga cggccagt 18

<210> 10
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
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 sequence

<220>
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<400> 10
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<210> 11
 <211> 37
 <212> DNA
 <213> Artificial Sequence

<220>
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<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 11
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<210> 12
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
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<220>
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<400> 12
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<210> 13
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Combined DNA/RNA Molecule:synthetic
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<220>
 <223> Description of Artificial Sequence:synthetic
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<220>
 <223> Universal Amplification Primer

<400> 13
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<210> 14
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
 sequence

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 14
 gtgatgctga ttttgcctt 20

<210> 15
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
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<220>
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<400> 15
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<210> 16
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
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<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 16
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<210> 17
 <211> 48
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Combined DNA/RNA Molecule:synthetic
 sequence

<220>
 <223> Description of Artificial Sequence:synthetic

sequence

<220>
 <223> Anchor Primer

<220>
 <221> variation
 <222> (36).. (47)

<400> 17
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<210> 18
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:synthetic
 sequence

<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 18
 ccagaaatgg cagcaaaga 19

<210> 19
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
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<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 19
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<210> 20
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<220>
 <223> Description of Artificial Sequence:synthetic
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<220>
 <223> Inventor: Kano, Rui; Inoue, Chika.

<400> 20
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